

WHAT IS CLAIMED IS:

- 1 1. A method comprising:
2 in response, at least in part, to a request for a service from a system,
3 determining a quality of service to assign to an application to be
4 executed by the system to provide the service, the quality of service
5 based, at least in part, on one or more service characteristics of the
6 application; and
7 allocating one or more resources to the application, the one or more
8 resources being based, at least in part, on the quality of service.
- 1 2. The method of claim 1, wherein the system comprises a modified
2 intelligent media center (MIMC), and said determining a quality of service
3 to assign to an application to be executed by the system to provide the
4 service comprises determining a quality of service to assign to a
5 multimedia application to be executed by the MIMC to provide the service.
- 1 3. The method of claim 2, wherein said determining the quality of service to
2 assign to the multimedia application comprises assigning one or more
3 QoS (quality of service) parameters to the application, the QoS
4 parameters being based on a class of service associated with the one or
5 more service characteristics of the multimedia application.
- 1 4. The method of claim 3, wherein the multimedia application is a wireless
2 application, and the one or more QoS parameters comprise at least one

3 of:
4 AIFS (arbitration inter-frame space);
5 CW_{min} (minimum contention window);
6 CW_{max} (maximum contention window); and
7 PF (persistence factor).

1 5. The method of claim 3, wherein said determining the quality of service to
2 assign to the multimedia application additionally comprises determining a
3 size of packets to be used for transmitting data associated with the
4 multimedia application from the system to a client.

1 6. The method of claim 5, wherein said determining the size of packets
2 comprises determining a size of an MSDU (MAC – media access layer –
3 service data unit) based, at least in part, on at least one of the one or
4 more service characteristics.

1 7. The method of claim 6, wherein said determining the size of the data
2 packets additionally comprises determining the size of the MSDU based,
3 at least in part, on a priority associated with the class of service.

1 8. The method of claim 1, wherein said allocating the one or more resources
2 to the application based, at least in part, on the quality of service
3 comprises assigning at least one of:
4 a processing throughput;

5 a queue length; and

6 memory buffer size.

1 9. The method of claim 1, additionally comprising:

2 queuing the application for servicing; and

3 scheduling the application for servicing.

1 10. An apparatus comprising:

2 circuitry capable of:

3 in response, at least in part, to a request for a service from a system,

4 determining a quality of service to assign to an application to be

5 executed by the system to provide the service, the quality of service

6 based, at least in part, on one or more service characteristics of the

7 application; and

8 allocating one or more resources to the application, the one or more

9 resources based, at least in part, on the quality of service.

1 11. The apparatus of claim 10, wherein the system comprises a modified

2 intelligent media center (MIMC), and the circuitry that is capable of

3 determining a quality of service to assign to an application to be executed

4 by the system to provide the service is capable of determining a quality of

5 service to assign to a multimedia application to be executed by the MIMC
6 to provide the service.

1 12. The apparatus of claim 11, wherein said circuitry capable of determining
2 the quality of service to assign to the multimedia application is also
3 capable of assigning one or more QoS (quality of service) parameters to
4 the multimedia application.

1 13. The apparatus of claim 12, wherein the multimedia application is a
2 wireless application, and the one or more QoS parameters comprise at
3 least one of:

4 AIFS (arbitration inter-frame space);

5 CW_{min} (minimum contention window);

6 CW_{max} (maximum contention window); and

7 PF (persistence factor).

1 14. The apparatus of claim 12, wherein said circuitry capable of determining
2 the quality of service to assign to the multimedia application is also
3 capable of determining a size of packets to be used for transmitting data
4 associated with the multimedia application from the system to a client.

1 15. The apparatus of claim 10, wherein said circuitry capable of allocating the
2 one or more resources to the application based, at least in part, on the
3 quality of service is also capable of assigning at least one of:

4 a processing throughput;

5 a queue length; and

6 memory buffer size.

1 16. The apparatus of claim 10, additionally said circuitry additionally capable
2 of:

3 queuing the application for servicing; and

4 scheduling the application for servicing.

1 17. A system comprising:

2 one or more applications to be executed to provide one or more services
3 to one or more clients;

4 one or more resources to support the execution of the one or more
5 applications;

6 a wireless network interface card to receive from the one or more clients,
7 one or more requests for a service; and

8 circuitry communicatively coupled to the wireless network interface card,
9 and capable of:

10 in response, at least in part, to a request for a service, determining

11 a quality of service to assign to one of the applications to

12 provide one of the one or more services, the quality of

13 service based, at least in part, on one or more service
14 characteristics of the application; and
15 allocating at least one of the one or more resources to the
16 application, the at least one of the one or more resources
17 based, at least in part, on the quality of service.

1 18. The system of claim 17, wherein the system comprises a modified
2 intelligent media center (MIMC), and the circuitry that is capable of
3 determining a quality of service to assign to an application to be executed
4 by the system to provide the service is capable of determining a quality of
5 service to assign to a multimedia application to be executed by the MIMC
6 to provide the service.

1 19. The system of claim 18, wherein said circuitry capable of determining the
2 quality of service to assign to the multimedia application is also capable of
3 assigning one or more QoS (quality of service) parameters to the
4 multimedia application.

1 20. The system of claim 19, wherein said circuitry capable of determining the
2 quality of service to assign to the multimedia application is also capable of
3 determining a size of packets to be used for transmitting data associated
4 with the multimedia application from the system to the client.

1 21. The system of claim 17, wherein said circuitry capable of allocating the
2 one or more resources to the multimedia application based, at least in
3 part, on the quality of service is also capable of assigning at least one of:

4 a processing throughput;

5 a queue length; and

6 memory buffer size.

1 22. The system of claim 17, additionally said circuitry additionally capable of:

2 queuing the application for servicing; and

3 scheduling the application for servicing.

1 23. The system as in claim 17, wherein said circuitry is capable of operating in

2 a bearer plane of a communications environment.

1 24. A machine-readable medium having stored thereon instructions, the

2 instructions when executed by a machine, result in the following:

3 in response, at least in part, to a request for a service from a system,

4 determining a quality of service to assign to an application to be

5 executed by the system to provide the service, the quality of service

6 based, at least in part, on one or more service characteristics of the

7 application; and

8 allocating one or more resources to the application, the one or more

9 resources based, at least in part, on the quality of service.

1 25. The machine-readable medium of claim 24, wherein the system comprises

2 a modified intelligent media center (MIMC), and said instructions that

3 result in determining a quality of service to assign to the application result

4 in determining a quality of service to assign to a multimedia application to
5 be executed by the MIMC to provide the service.

1 26. The machine-readable medium of claim 25, wherein said instructions that
2 result in determining the quality of service to assign to the multimedia
3 application result in assigning one or more QoS (quality of service)
4 parameters to the multimedia application.

1 27. The machine-readable medium of claim 26, wherein the multimedia
2 application is a wireless application, and the one or more QoS parameters
3 comprise at least one of:

4 AIFS (arbitration inter-frame space);

5 CW_{min} (minimum contention window);

6 CW_{max} (maximum contention window); and

7 PF (persistence factor).

1 28. The machine-readable medium of claim 26, wherein said instructions,
2 when executed by a machine, that result in determining the quality of
3 service to assign to the multimedia application additionally result in
4 determining a size of packets to be used for transmitting data associated
5 with the multimedia application from the system to a client.

1 29. The machine-readable medium of claim 24, wherein said instructions,
2 when executed by a machine, result in allocating the one or more
3 resources to the application based, at least in part, on the quality of

4 service additionally result in assigning at least one of:

5 a processing throughput;

6 a queue length; and

7 memory buffer size.

1 30. The machine-readable medium of claim 24, said instructions, when
2 executed by a machine, additionally result in:

3 queuing the application for servicing; and

4 scheduling the application for servicing.